UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BHAVESH MEHTA and MICHAEL D. BIGBY

Appeal 2007-2891
Application 10/648,599
Technology Center 3600

Decided: December 19, 2007

Before LINDA E. HORNER, ANTON W. FETTING, and DAVID B. WALKER, *Administrative Patent Judges*.

HORNER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants seek our review under 35 U.S.C. § 134 of the Examiner's final rejection of claims 1 and 3-10, all the claims currently pending in the application. We have jurisdiction under 35 U.S.C. § 6(b) (2002).

SUMMARY OF DECISION

We AFFIRM.

THE INVENTION

Appellants' claimed invention is directed to a method for selecting among advertisements that are competing for a slot associated with electronic content that is to be delivered over a network (Spec. ¶ 1). Claim 1, reproduced below, is representative of the subject matter on appeal.

> 1. A method for determining which advertisements to include with electronic content delivered to users over a network, wherein the method comprises performing a machine-executed operation involving instructions, wherein the machine-executed operation is at least one of:
>
> A) sending said instructions over transmission media;
>
> B) receiving said instructions over transmission media;
>
> C) storing said instructions onto a machine-readable storage medium; and
>
> D) executing the instructions;
>
> wherein said instructions are instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:
>
> storing sequence information that indicates a sequence for a plurality of advertisements, wherein each of said plurality of advertisements is associated with corresponding delivery criteria;
>
> receiving a request to provide over said network a piece of electronic content that includes a slot for an advertisement;
>
> comparing slot attributes of said slot with delivery criteria of said advertisements to determine a subset of said plurality of advertisements which quality for inclusion in said slot; and
>
> from said subset of advertisements, selecting an advertisement to include in the slot based, at least in part, on relative positions, within said sequence, of the advertisements in said subset,

wherein each advertisement of said plurality of advertisements has a corresponding delivery obligation, and

wherein the relative position of advertisements in said sequence corresponds to when the corresponding delivery obligation was incurred.

THE REJECTIONS

The Examiner relies upon the following evidence in the rejections:

Carruthers	US 2002/0128904 A1	Sep. 12, 2002

The following rejections are before us for review.

1. Claims 1 and 3-10[1] stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.
2. Claims 1 and 3-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Carruthers.

ISSUES

Appellants contend that claims 1 and 3-10 meet the "utility" requirement of 35 U.S.C. § 101 because the steps of sending and receiving the claimed instructions are prerequisites of executing the instructions and "[l]ogic dictates that it must be useful to perform an operation that is a prerequisite to achieving a useful result" (Appeal Br. 10) (emphasis in original), and claims 1 and 3-10 are patentable over Carruthers because Carruthers (1) "lacks any teaching or suggestion of selecting advertisements to include in a slot based, at least in part, on [relative positions of advertisements in] a sequence that corresponds to when the corresponding delivery obligations of the advertisements were incurred", and (2)

[1] We note that claim 3 depends from canceled claim 2. Therefore, should prosecution of the application continue, claim 3 should be amended to correct its dependency.

"teaches away from this feature by teaching that the order in which advertisements are shown is initially based on the goals of active advertising campaigns, and that order may be subsequently revised based on the daily goals for each active advertising campaign" (Appeal Br. 19-20).

In the rejection under § 101, the Examiner found that "[b]ecause claim 1 does not necessarily require the instructions to be executed, the claim is not taken to positively set forth a useful result" (Answer 3). Regarding the rejection under § 103, the Examiner found that Carruthers uses a "first-come first-served" concept in which the first advertisers to make ad campaign contracts are more likely to be accepted than latecomers, and held that "[i]t would have been obvious…to have given further improved treatment to early advertisers by employing such a well known 'first come, first served' notion and included prioritization of the master list of scheduled ads based upon when the advertisers contracted with the system." (Answer 4).

The issues before us are:

1.Whether Appellants have shown that the Examiner erred in rejecting claims 1 and 3-10 as being directed to non-statutory subject matter.

2.Whether Appellants have shown that the Examiner erred in rejecting claims 1 and 3-10 as being unpatentable over Carruthers.

FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed.

Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1.Carruthers teaches a method and system for scheduling targeted content delivery to online users (Carruthers ¶ 7).

2.The method includes receiving proposed new ad campaigns over transmission media (Carruthers, Fig. 3).

3.The scheduler system of Carruthers reviews new advertising campaigns proposed by advertisers and predicts whether campaign objectives are achievable in view of forecasted inventory. The system generates a master delivery plan based on expected values to fulfill advertiser contracts and optimize usage of surplus inventory. The plan is periodically modified based on delivery feedback information. The system also dynamically generates individual user schedules on user login (Carruthers ¶ 8).

4.The master server system 18 includes various software components for managing content delivery including a Dynamic Campaign Manager 50, a Capacity Forecaster 52, a Delivery Manager 54, an Inventory Manager 51, system configuration information 53, and a matcher 56 (Carruthers ¶ 22).

5.The Capacity Forecaster 52 reviews new campaigns proposed by advertisers and predicts whether their campaign objectives are achievable in view of forecasted inventory of user screen real estate. The Capacity Forecaster 52 thereby assists in forming contracts having an expected high degree of success (Carruthers ¶ 23).

6.The Inventory Manager 51 generates a candidate plan to fulfill new and existing advertiser contracts and to optimize usage of surplus user screen real estate (Carruthers ¶ 24).

7.The plan specifies a prioritized master list of advertisements, which is sent to the On-Demand Scheduler 70 at each POP server 16. The prioritized content list identifies the order in which advertisements are to be displayed. The order is preferably based both upon priority and some weighting mechanism that indicates how many impressions are needed by each campaign (Carruthers ¶ 34).

8.The Delivery Manager 54 can reorder or reprioritize the master list of scheduled advertisements based upon delivery feedback data and queuing logic/algorithms (Carruthers ¶ 35).

9.Carruthers is silent regarding how priority is established in the initial generation of the master list.

PRINCIPLES OF LAW

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of skill in the art. *Graham v.*

John Deere Co., 383 U.S. 1, 17-18 (1966). *See also KSR*, 127 S.Ct. at 1734 ("While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.") The Court in *Graham* further noted that evidence of secondary considerations "might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." 383 U.S. at 17-18.

ANALYSIS

Rejection of claims 1 and 3-10 as directed to non-statutory subject matter

The Examiner rejected claims 1 and 3-10 under 35 U.S.C. § 101 "because they do not set forth a useful result" (Answer 3). More specifically, the Examiner found that claims 1 and 3-10 do not produce a useful, concrete, and tangible result because mere sending, receiving, and/or storing of instructions does not accomplish a useful result. Although we agree that merely sending, receiving, and/or storing the recited instructions does not achieve the intended result set forth in the preamble of claim 1 (i.e., determining which advertisements to include with electronic content), they do nonetheless produce a useful result (i.e., the sending, receiving, and/or storing of data). As such, we reverse the Examiner's rejection of claims 1 and 3-10 under 35 U.S.C. § 101.

Rejection of claims 1 and 3-10 as unpatentable over Carruthers

Appellants argue claims 1 and 3-10 as a group (Appeal Br. 24). As such, we select claim 1 as a representative claim, and the remaining claims of the group, i.e., claims 3-10, stand or fall with claim 1. 37 C.F.R. § 41.37(c)(1)(vii) (2007).

Claim 1 defines a method for determining which advertisements to include with electronic content delivered to users over a network. The method comprises performing a machine-executed operation involving instructions. Claim 1 further defines the machine-executed operation to be *at least one of*: A) sending the instructions over transmission media; B) receiving the instructions over transmission media; C) storing the instructions onto a machine-readable storage medium; and D) executing the instructions. Claim 1 specifically recites that the instructions are instructions which cause one or more processors to perform specifically recited steps.

Appellants contend that claim 1 is patentable over Carruthers because (1) Carruthers fails to teach or suggest "selecting advertisements to include in a slot based, at least in part, on a sequence that corresponds to when the corresponding delivery obligations of the advertisements were incurred" (Appeal Br. 19), and (2) Carruthers teaches away from such a modification because Carruthers teaches "that the order in which advertisements are shown is initially based on the goals of active advertising campaigns, and that order may be subsequently revised based on the daily goals for each active advertising campaign" (Appeal Br. 20). We disagree.

Carruthers teaches a method and system for scheduling targeted content delivery to online users (Finding of Fact 1). The scheduler system of Carruthers reviews new advertising campaigns proposed by advertisers and predicts whether campaign objectives are achievable in view of forecasted inventory. The system generates a master delivery plan based on expected values to fulfill advertiser contracts and optimize usage of surplus inventory. The plan is periodically modified based on delivery feedback information. The system also dynamically generates individual user schedules on user login (Finding of Fact 3).

The master system 18 of Carruthers includes various software components for managing content delivery including a Dynamic Campaign Manager 50, a Capacity Forecaster 52, a Delivery Manager 54, an Inventory Manager 51, system configuration information 53, and a matcher 56 (Finding of Fact 4). The Capacity Forecaster 52 reviews new campaigns proposed by advertisers and predicts whether their campaign objectives are achievable in view of forecasted inventory of user screen real estate in order to assist in forming contacts having an expected high degree of success (Finding of Fact 5). The Inventory Manager 51 generates a candidate plan to fulfill new and existing advertiser contracts and to optimize usage of surplus user screen real estate (Finding of Fact 6). The plan specifies a prioritized master list of advertisements, which is sent to the On-Demand Scheduler 70 at each POP server 16 (Finding of Fact 7). The prioritized content list identifies the order in which advertisements are to be displayed. The order is preferably based both upon priority and some weighting mechanism that indicates how many impressions are needed by each campaign (Finding of Fact 7). The

Delivery Manager 54 can reorder or reprioritize the master list of scheduled advertisements based upon delivery feedback data and queuing logic/algorithms (Finding of Fact 8). Carruthers is silent regarding how priority is established in the initial generation of the master list (Finding of Fact 9).

In rejecting claim 1, the Examiner held it would have been obvious to modify Carruthers to use a first-come, first-served notion when generating the master list because it is a well known notion and Carruthers utilizes a similar notion with its Capacity Forecaster, which determines whether a new ad campaign is achievable before accepting it (i.e., new ad campaigns are not accepted if there are not enough available slots to satisfy the new campaign in view of already-accepted ad campaigns) (Answer 4, 7). In addition, claim 1 requires that the selection only be based *in part* on relative position; therefore, the Examiner held it would have been obvious to include an additional selection factor of first-come, first-served in addition to a factor representing the most-behind-first approach of Carruthers as weighted selection factors of Carruthers (Answer 10).

Appellants further contend that Carruthers teaches away from such a modification because Carruthers teaches "that the order in which advertisements are shown is initially based on the goals of active advertising campaigns, and that order may be subsequently revised based on the daily goals for each active advertising campaign" (Appeal Br. 20). We disagree.

Although Carruthers teaches that the Inventory Manager 51 calculates a daily goal *number* of impressions (i.e., advertisements) to be sent in order to meet contract requirements (Carruthers ¶ 33), Carruthers does not teach that the priority

of the master list is based solely on daily goals. To the contrary, Carruthers specifically teaches that the prioritized master list is based *both* upon priority and some weighting mechanism, i.e., the daily goals (Finding of Fact 7). Therefore, Carruthers does not teach away from using the corresponding delivery obligation as part of the priority of the master list. As noted by the Examiner, first-come, first-served is a well known concept. This concept, in combination with the fact that Carruthers teaches determining whether accepting additional ad campaigns would be achievable in view of the existing obligations, would have led one skilled in the art to base the initial priority on a first-come, first-served basis, as suggested by the Examiner. As such, we sustain the Examiner's rejection of claims 1 and 3-10 as unpatentable over Carruthers.

CONCLUSIONS OF LAW

We conclude that the Examiner erred in rejecting claims 1 and 3-10 under 35 U.S.C. § 101 as being directed to non-statutory subject matter, and Appellants have not shown that the Examiner erred in rejecting claims 1 and 3-10 as unpatentable over Carruthers.

DECISION

The Examiner's decision to reject claims 1 and 3-10 under 35 U.S.C. § 101 is reversed. The Examiner's decision to reject claims 1 and 3-10 under 35 U.S.C. § 103(a) as unpatentable over Carruthers is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv) (2007).

AFFIRMED

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